

Erratum: "Characterization of the near-field and convectional transport behavior of micro and nanoparticles in nanoscale plasmonic optical lattices" [Biomicrofluidics 10, 034102 (2016)]

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In Ref. 1, a typographical error has occurred in Eq. (5b) for the natural convection velocity using the Boussinesq approximation. In particular, the density of water ρ_{water} should have been removed and the equation should have been written as

$$-\nu \nabla^2 \vec{u}(\vec{r}) = g\beta(T)[T(\vec{r}) - T_0]\hat{z}.$$

In addition, the order of magnitude estimate in the sentence "An order of magnitude estimate for the natural convection velocity from Eq. (5b) is $u \sim H^2 g \beta/\nu$, which is in the order of μ m/s, in agreement with the maximal velocities in the simulation in Fig. 5.²⁹" should have been corrected to "An order of magnitude estimate for the natural convection velocity from Eq. (5b) is $u \sim H^2 g \beta \Delta T/\nu$, which is in the order of μ m/s, in agreement with the maximal velocities in the simulation in Fig. 5.²⁹"

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²⁹See supplementary material http://dx.doi.org/10.1063/1.4948775 for Matlab codes and additional data.

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